

Materials List for:

The Assembly and Application of 'Shear Rings': A Novel Endothelial Model for Orbital, Unidirectional and Periodic Fluid Flow and Shear Stress

Luke A. White¹, Emily V. Stevenson¹, J. Winny Yun¹, Randa Eshaq¹, Norman R. Harris¹, David K. Mills², Alireza Minagar³, Pierre-Olivier Couraud⁴, J. Steven Alexander¹

¹Molecular and Cellular Physiology, Louisiana State University Health Sciences Center in Shreveport

²Biological Sciences, Louisiana Tech University

³Neurology, Louisiana State University Health Sciences Center in Shreveport

⁴Institut Cochin, Inserm U1016, Cnrs Umr8104, Université Paris Descartes

Correspondence to: J. Steven Alexander at jalex@lsuhsc.edu

URL: <https://www.jove.com/video/54632>

DOI: [doi:10.3791/54632](https://doi.org/10.3791/54632)

Materials

Name	Company	Catalog Number	Comments
100 x 20 mm plastic tissue culture dish	Corning	430167	The dishes must be polystyrene
150 x 25 mm plastic tissue culture dish	Corning	430599	The dishes must be polystyrene
150 mm glass Petri dish	Fisher	3160150BO	
15 ml polystyrene tissue culture plastic tubes	Falcon	352099	
Methylene chloride	Sigma-Aldrich	D65100	
silicone rubber sealant	DAP	7079808641	
ethanol	Decon	2701	
3 ml transfer pipette	Becton-Dickinson	357524	
printer paper			
scissors			
gloves			
rotary tool and set	Dremel	4000-6/50	
rotary tool cutting head	Dremel	EZ476	
rotary tool drill head			
distilled water			
orbital shaker	VWR	57018-754	
incubator			
Rat retinal microvascular endothelial cells	Cell Biologics	RA-6065	